

IN THE CLAIMS

1. (cancelled).

2. (currently amended): A radio communication apparatus operating as a control station in a radio communication environment wherein a plurality of wireless networks operating under the control of a control station coexist, the radio communication apparatus comprising:

beacon transmitting means for setting a transmission frame period of a local network and transmitting beacon information regarding resource allocation at a predetermined position of the transmission frame period;

interference detecting means for detecting whether the local network interferes with another network; and

buffer frame period setting means for setting a buffer frame period having a different frame period to change the position of a transmission frame period upon detection of interference between networks,

wherein the interference detecting means detects interference of beacon information on the basis of parameters obtained by receiving beacon information transmitted from another network.

3. (cancelled).

4. (previously presented): The radio communication apparatus according to Claim 2, wherein

the transmission frame period includes a contention free period wherein data communication is effected based on range reservation/allocation, and

the interference detecting means detects whether contention free periods are synchronized between networks based

on parameters obtained by receiving beacon information transmitted from another network.

5. (previously presented): The radio communication apparatus according to Claim 4, wherein the buffer frame setting means sets a buffer frame period that is shorter than a transmission frame period so as to ease the interference of contention free periods between networks.

6. (previously presented): The radio communication apparatus according to Claim 2, wherein the interference detecting means detects interference between networks based on information from a radio communication apparatus in the local network.

7. (previously presented): The radio communication apparatus according to Claim 2, wherein the buffer frame setting means sets a buffer frame period that is shorter than a transmission frame period so as to ease collision of transmission positions of beacon information between networks.

8. (currently amended): A radio communication method for a control station to operate in a radio communication environment wherein a plurality of wireless networks operating under control of the control station coexists, the method comprising:

a beacon transmission step for setting a transmission frame period of a local network and transmitting beacon information regarding resource allocation at a predetermined position of the transmission frame period;

an interference detection step for detecting whether the local network interferes with another network; and

a buffer frame period setting step for setting a buffer frame period that is different than a transmission frame period, thereby to change a position of the transmission frame period upon detection of interference between networks,

wherein the interference detection step detects interference of beacon information on the basis of parameters obtained by receiving beacon information transmitted from another network.

9. (cancelled).

10. (previously presented): The radio communication method according to Claim 8, wherein

the transmission frame period includes a contention free period wherein data communication is effected based on range reservation/allocation, and

the interference detection step detects whether contention free periods are synchronized between networks based on parameters obtained by receiving beacon information transmitted from another network.

11. (previously presented): The radio communication method according to Claim 10, wherein the buffer frame setting step sets a buffer frame period that is shorter than a transmission frame period so as to ease the interference of contention free periods between networks.

12. (previously presented): The radio communication method according to Claim 8, wherein the interference detection step detects interference between networks based on information from a radio communication apparatus in the local network.

13. (previously presented): The radio communication method according to Claim 12, wherein the buffer frame setting step sets a buffer frame period that is shorter than a transmission frame period so as to ease collision of transmission positions of beacon information between networks.

14. (previously presented): A radio communication apparatus operating in a particular wireless network in a radio communication environment wherein a plurality of wireless networks operating under control of a control station coexists, the radio communication apparatus comprising:

beacon information receiving means for receiving beacon information from a control station of a local network in a predetermined beacon information receiving range;

beacon information detecting means for detecting beacon information from a control station of another network;

collision detecting means for detecting whether beacon information of the local network collides with beacon information of another network; and

interference informing means for notifying a control station of the local network of a beacon information collision detection result.

15. (currently amended): A radio communication apparatus according to Claim 14, wherein the beacon information detecting means sets a ~~redundant~~ predetermined time for a beacon information receiving range to detect beacon information from a control station of another network.

16. (previously presented): A radio communication apparatus according to Claim 14, wherein the interference informing means for reporting a beacon information collision

detection result by using a management time slot allocated to a control station of the local network.

17. (previously presented): A radio communication method carried out in a particular wireless network in a radio communication environment wherein a plurality of wireless networks operating under control of a control station coexists, comprising:

a beacon information receiving step for receiving beacon information from a control station of a local network in a predetermined beacon information receiving range;

a beacon information detection step for detecting beacon information from a control station of another network;

a collision detection step for detecting whether beacon information of the local network collides with beacon information of another network; and

an interference informing step for notifying a control station of the local network of a beacon information collision detection result.

18. (currently amended): A radio communication method according to Claim 17, wherein the beacon information detection step sets a ~~redundant~~ predetermined time for a beacon information receiving range to detect beacon information from a control station of another network.

19. (previously presented): A radio communication method according to Claim 17, wherein the interference informing step for reporting a beacon information collision detection result by using a management time slot allocated to a control station of the local network.

20. (currently amended): A computer readable medium storing a computer program described in a computer-readable format so as to carry out on a computer system, processing for a control station to operate in a radio communication environment wherein a plurality of wireless networks operating under the control of a control station coexist, comprising:

~~a beacon transmitting step for setting a transmission frame period of a local network and transmitting beacon information regarding resource allocation at a predetermined position of the transmission frame period;~~

~~an interference detection step for detecting whether the local network interferes with another network; and~~

~~a buffer frame period setting step for setting a buffer frame period that is different than a transmission frame period, thereby to change a position of the transmission frame period upon detection of interference between networks,~~

wherein the step of detecting detects interference on the basis of parameters obtained by receiving beacon information transmitted from another network.

21. (currently amended): A computer readable medium storing a computer program described in a computer-readable format so as to carry out, on a computer system, processing for an operation in a particular wireless network in a radio communication environment wherein a plurality of wireless networks operating under the control of a control station coexist, comprising:

~~a beacon information receiving step for receiving beacon information from a control station of a local network in a predetermined beacon information receiving range;~~

~~a beacon information detection step for detecting beacon information from a control station of another network;~~

a collision detection step for detecting whether beacon information of the local network collides with beacon information of another network; and

an interference informing step for notifying a control station of the local network of a beacon information collision detection result.